

CLAIMS

1. A method for generating superset pinouts for a family of devices, comprising the steps of:

(A) defining a pinlist for each device within said family of devices;

5 (B) generating a superset listing of pins from said pinlist;

(C) creating said superset pinout for said family of devices; and

10 (D) marking each pin of said superset pinout associated with each member of said family of devices.

2. The method according to claim 1, wherein step (D) further comprises;

customizing said superset pinout.

3. The method according to claim 2, wherein step (D) further comprises:

marking a specific pinout for each member of said family of devices in response to the customizing.

4. The method according to claim 1, wherein said family of devices comprises devices with combined programmable logic and high-speed serial channels.

5. The method according to claim 1, wherein step (C) further comprises:

eliminating footprint variations within said family of devices with said superset pinout.

6. The method according to claim 1, wherein step (C) further comprises:

eliminating layout variations within said family of devices with said superset pinout.

7. The method according to claim 1, wherein step (B) further comprises:

combining pins shared by more than one member.

8. The method according to claim 1, wherein step (C) further comprises:

allocating a pin for each signal in said pinlist.

9. The method according to claim 1, wherein step (C) further comprises:

providing a footprint common to members of said family of devices.

10. The method according to claim 1, wherein step (C) further comprises:

accommodating needs common to members of said family of devices with said superset pinout.

11. The method according to claim 1, wherein step (C) further comprises:

limiting each pin to a single function.

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12. The method according to claim 1, wherein step (D) further comprises:

initiating after said pinout is completed.

13. The method according to claim 1, wherein step (D) further comprises:

marking one or more pins no-connect for a particular member device.

14. The method according to claim 1, wherein said family of devices comprise programmable logic and high-speed serial channel devices.

15. The method according to claim 1, wherein step (C) further comprises:

allowing for migration of devices within said family of devices.

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16. The method according to claim 1, wherein step (C) further comprises:

allowing for migration to higher gate densities.

17. The method according to claim 1, wherein step (C) further comprises:

allowing for migration to increased bandwidth channels.

18. The method according to claim 1, wherein step (C) further comprises:

reducing layout and footprint changes on a board between said family of devices.

19. An apparatus comprising:

means for generating superset pinouts for a family of devices;

means for defining a pinlist for each device within said

5 family of devices;

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CD01103

means for generating a superset listing of pins from said
pinlist;

means for creating said superset pinout for said family
of devices; and

10 means for marking each pin of said superset pinout
associated with each member of said family of devices.

20. An apparatus comprising:

a device configured to generate superset pinouts for a
family of devices, wherein said device is further configured to
define a pinlist for each device within said family of devices,
generate a superset listing of pins from said pinlist, create said
superset pinout for said family of devices, and mark each pin of
said superset pinout associated with each member of said family of
devices.